UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/547,701	02/02/2006	Eyal Gehasie		9153

1444 7590 04/09/2009

BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303

EXAMINER	
MOORE, IAN N	

ART UNIT	PAPER NUMBER
2416	

MAIL DATE	DELIVERY MODE
04/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/547,701	GEHASIE ET AL.	
	Examiner	Art Unit	
	IAN N. MOORE	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 44-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,9-16,44-52 and 54-61* is/are rejected.

7)☒ Claim(s) *7,8 and 53* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/2/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 3, 7, 8, 11-13, 46-61 are objected to because of the following informalities:

Claim 3 recites **"inputting/outputting"** in line 3 and "input/output" in line 6. It is suggested to clarify the use of words instead of "/".

Claim 7 recites the clause with the optional language "operable to" in line 6. In order to present the claim in a better form and to describe a positive or require steps/function to be performing (i.e. using the claim language that does not suggest or make optionally but required steps to be performed), applicant is suggested to revise the claim language such that the steps/functions, which follows "operable to", to be performed are required (not optional).

Claim 11 is also objected for the same reason as set forth above in claim 7.

Claim 46 recites "the device comprising the acoustic transducer arrangement of **claim 1**" in line 2. For clarity, it is suggested to incorporate all limitations of claim 1, instead of referring to claim 1.

Claim 47 is also objected for the same reason as set forth above in claim 46.

Claim 48 recites, "**it**" in line 10. For clarity, it is suggested to use a real word, rather using the pronoun.

Claims 8, 12, 13, 49-61 are also objected since they are depended upon objected claims as set forth above.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 14, 15, 16, 45-48, 50, 52, 54, 57-59 and 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Hiramatsu (US 6,594,052).

Regarding claim 1, Hiramatsu discloses an acoustic transducer arrangement (see FIG. 1, acoustic signal setup/arrangement in the transmitting apparatus 1) comprising:

an acoustic transmitter assembly (see FIG. 1, a transmit multiplexer 14) including an array of transmitter elements (see FIG. 1, includes a group/array of transmit multiplexers 14-1, 14-2, 14-3; see col. 4, line 65 to col. 5, line 10) operable to generate together a multi- frequency acoustic signal (see FIG. 1, operating together to transmit multiplexed/multi frequency acoustic signal; see col. 5, line 40-65);

a control unit (see FIG. 1, CPU 16) preprogrammed to operate the acoustic transmitter assembly (see FIG. 1, process/operate the transmit multiplexer 14; see col. 5, line 2-40) in accordance with a digital data stream indicative of a received signal (see FIG. 1, according to voice data/digital signal from a received analog voice signal) to generate the multi-frequency acoustic signal indicative of the received data stream (see FIG. 1, to generate/produce multiplex/multi frequency acoustic signal; see col. 5, line 2-65).

Regarding claim 2, Hiramatsu discloses an acoustic receiver assembly (see FIG. 1, receiving means of transmitting apparatus 1) operable to receive a multi-frequency acoustic signal (see FIG. 1, detector 24 receives the multiplex/multi frequency acoustic signal; see col. 4, line 5-65), the control unit (see FIG. 1, CPU 16-1) being preprogrammed to process data representative of the received acoustic signal to demodulate it into an output data stream (see FIG. 1, to process receiver 23 to demodulate the receive acoustic signal into an output voice data 1; see col. 4, line 30-65; see col. 6, line 15-25; see col. 14, line 25 to col. 15, line 65) and for operating an output utility to output the demodulated data, representative of the received multi-frequency acoustic signal, in a predetermined format (see FIG. 1, processing/operating receiver 23 to transmit demodulated voice data which represents multi-frequency acoustic signal, and the voice data has a predetermined/predefined format; see col. 4, line 30-65; see col. 6, line 15-25; see col. 14, line 25 to col. 15, line 65).

Regarding claim 3, Hiramatsu discloses at least one input/output port for inputting/outputting a data stream in the form of at least one of the following signal formats: infra-red signal (see FIG. 1, infrared emitter 22 or infrared detector 24 transmits/receives a voice data/digital signal as infrared signal; see col. 5, line 2 to col. 6, line 25), the control unit being connected to the input/output port (see FIG. 1, CPU 16 connects to infrared emitter 22 or infrared detector 24 interface/port) for receiving the data stream that is to be transmitted through the transmitter assembly as an acoustic signal (see FIG. 1, receiving voice data/digital signal to transmitter via transmitter as an acoustic signal; see col. 5, line 2 to col. 6, line 25).

Regarding claims 14 and 57, Hiramatsu discloses wherein the control unit is configured to apply an amplitude modulation to the frequency components, wherein said processing of the

digital data stream comprises an amplitude modulation of the data stream (see col. 6, line 5-15; see col. 14, line 20-25; 49-60; CPU applying ASK modulation to the frequency data/components).

Regarding claims 15 and 58, Hiramatsu discloses wherein the amplitude modulation utilizes at least **one** of the following:

is based on that the amplitudes of the frequency components in the multi-frequency stream vary in a certain predefined order (see col. 6, line 5-15; see col. 14, line 20-25; 49-60; frequency in the multiplex/multi frequency data stream changes/varies in specific order within predefine/predetermine sequence of frequencies, 2 MHz to 6 MHz);

and is based on a specific key defining a certain difference between the amplitudes of the adjacent frequency components in the multi-frequency stream (see col. 6, line 5-15; see col. 14, line 20-25; 49-60; based on ASK (amplitude Shift keying) which defines a various/different shifting in amplitude of the different neighbor/adjacent frequency in the multiplex/multi-frequency signal).

Regarding claims 45 and 61, Hiramatsu discloses wherein the error correction utilizes a certain key in the form of a predetermined digital stream periodicity in the received acoustic signal (see col. 13, line 15-60; see col. 14, line 33-65; using a parity bits as a key in the voice data/digital stream in the received acoustic signal; also see FIG. 22).

Regarding claim 46, Hiramatsu discloses a communication device (see FIG. 1, transmission apparatus 1) connectable to a communication network (see FIG. 1, connects to transmission network), the device comprising the acoustic transducer arrangement of claim 1

(see FIG. 1, acoustic signal setup/arrangement in the transmitting apparatus 1); see col. 4, line 5-45.

Regarding claim 47, Hiramatsu discloses at least two communication devices (see FIG. 1, transmitting apparatus 1 and received apparatus 2-K) connectable to each other through at least one acoustic transducer arrangement of claim 1 (see FIG. 1, connected to each other via acoustic signal setup/arrangement); see col. 4, line 5-45.

Regarding claim 48, Hiramatsu discloses a method for use in data exchange between communication systems (see FIG. 1, method/process data between transmitting apparatus 1 and receiving apparatus 2), the method comprising utilizing an acoustic transducer arrangement to carrying out the following (see FIG. 1, transmitting apparatus 1 for transmitting acoustic signal processing the steps of) configured:

receiving an electrical signal encoded with data (see FIG. 1, receiving analog/electrical signal encoded with voice) coming from a first communication system (see FIG. 1, received from the source user/system; see col. 1, line 32-40) and addressed to a second communication system (see FIG. 1, addressed/targeted to receiving apparatus 2 in the receiving network; see FIG. 17; see col. 4, line 26 to col. 5, line 11; see col. 14, line 50 to col. 15, line 55);

converting the received signal into a corresponding digital data stream (see FIG. 1, encoder converts the received analog signal into a corresponding digital voice data; see col. 4, line 55-66);

processing said digital data stream to translate it into a predetermined sequence of frequencies (see FIG. 1, processing digital voice data to transform/translate into predefined sequence/number of frequencies (e.g. 2 MHz to 6 MHz); see col. 5, line 40-65);

concurrently operating an array of acoustic transmitters (see FIG. 1, parallel/concurrent a group/array of transmit multiplexers 14-1, 14-2; see col. 4, line 65 to col. 5, line 10) to generate a multi-frequency acoustic signal in the form of a superposition of frequency components generated by the acoustic transmitters (see FIG. 1, to generate/produce multiplexed/multi frequency acoustic signal in the form of a line/superpose/band of frequencies (e.g. 2 MHz to 6 MHz) generated/produced the multiplexers; see col. 5, line 48 to col. 6, line 15); and

transmitting the generated multi-frequency acoustic signal (see FIG. 1, transmitting multiplexed/multi frequency acoustic signal) to a second acoustic transducer arrangement associated with the second communication system (see FIG. 1, to receiving apparatus 2 in the receiving network; see col. 4, line 25-55; see col. 5, line 48 to col. 6, line 15).

Regarding claim 50, Hiramatsu discloses wherein the generated acoustic signal is transferred to the second communication system via a network formed by a plurality of the acoustic transducer arrangements communicatable with each other (see FIG. 1, multiplex/multi-frequency signal is transmitted to receiving apparatus 2-k in the receiving network thereby forming a acoustic communication network that communicates between transmitter apparatus and receiving apparatus 2-k; see FIG. 17; see col. 4, line 26 to col. 5, line 11; see col. 14, line 50 to col. 15, line 55).

Regarding Claim 52, Hiramatsu discloses wherein the frequency is higher than 20 kHz (see col. 5, line 50-65; 2 MHz, is higher than 20k Hz).

Regarding claims 11 and 54, Hiramatsu discloses wherein the control unit is operable to frequency modulate the output acoustic signal in accordance with a predetermined sequence of frequencies, and wherein said processing of the digital data stream includes frequency

modulation of the acoustic signal to be transmitted, in accordance with a predetermined sequence of frequencies. (see FIG. 1, the combined system of CPU 16 and transmitter 21 frequency modulates the transmit acoustic signal according to predefine sequence of frequencies 2 MHz to 6 MHz; see col. 5, line 20-65).

Regarding claims 16 and 59, Hiramatsu discloses the demodulation of the received acoustic signal includes an error correction (see col. 13, line 15-60; see col. 14, line 33-65; using parity bits (see FIG. 20) in the demodulated received signal for error correction).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu in view of Oikawa (US 6765930).

Regarding claims 9 and 10, Hiramatsu discloses wherein the acoustic receiver assembly (see FIG. 1, receiving means of transmitting apparatus 1) comprises at least one acoustic receiver (see FIG. 1, detector 24 receives the multiplex/multi frequency acoustic signal ; see col. 4, line 5-65).

Hiramatsu does not explicitly disclose “two”.

However, Oikawa teaches the acoustic receiver assembly comprises at least two acoustic receivers (see FIG. 1, signal component decoder 13-1 to 13-5; or see FIG. 5, spectrum transformer 2-1; are acoustic receivers; see col. 7, line 35 to col. 8, line 65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "two" receivers as taught by Oikawa in the system of Hiramatsu , so that it would reduce the circuit scale of a decode receiving apparatus; see Oikawa col. 6, line 1-36.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu in view of Feulner (US 6010303).

Regarding Claim 4, Hiramatsu discloses wherein each of the transmitter elements of the transmitter assembly (see FIG. 1, includes a group/array of transmit multiplexers 14-1, 14-2, 14-3; see col. 4, line 65 to col. 5, line 10) has a frequency different from that of the other elements (see FIG. 1, operating at various/multi frequencies; see col. 5, line 40-65); and is independently operated by the control unit to generate an acoustic wave component (see FIG. 1, CPU 16 generates acoustic data/component), the generated multi-frequency acoustic signal being of the multiple different frequency components (see FIG. 1, to generate/produce multiplex/multi frequency acoustic signal from different/multiple multiplexed frequency multiplexers; see col. 5, line 2-65).

Hiramatsu does not explicitly disclose "resonance" and "a superposition of sinusoidal signals".

However, Feulner teaches wherein each of the elements (see FIG. 1b, elements 212-216) has a resonance frequency different from that of the other elements (see FIG. 1b, 2a-b, has resonance frequency differences/variation from each other) and the generated multi-frequency signal being a superposition of sinusoidal signals of the multiple different frequency components (see FIG. 2a-b, creating a time varying signal with multiple frequencies which are the superposition of sinusoidal signals of the multiple different frequency waveforms A and B; see col. 2, line 4-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "resonance" and "a superposition of sinusoidal signals" as taught by Feulner in the system of Hiramatsu , so that it would provide Energy waves associated with aerodynamic or aeromechanical resonances in an aerocompression system of a turbofan engine are sensed in real-time and a real-time signal indicative of the frequencies of resonance are generated therefrom ; see Feulner col. 3, line 55-65.

Regarding Claim 5, Hiramatsu discloses wherein the frequency of the transmitter element is higher than 20 kHz (see col. 5, line 50-65; 2 MHz, is higher than 20k Hz). Feulner discloses resonance frequency as set forth above.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu in view of Kestler (US006148225A).

Regarding Claim 6, Hiramatsu discloses each of the transmitter elements is formed (see FIG. 1, a group/array of transmit multiplexers 14-1, 14-2, 14-3; see col. 4, line 65 to col. 5, line 10), a number of the multiple different frequency components being equal to the number of the

transmitter elements in the array (see FIG. 1, number of different frequencies equal to a group/array of transmit multiplexers 14-1, 14-2, 14-3; see col. 4, line 65 to col. 5, line 10).

Hiramatsu does not explicitly disclose "an oscillating element characterized by a specific resonance frequency".

However, Kestler teaches each of the transmitter elements (see FIG. 1, units 12A-E) is formed by an oscillating element (see FIG. 1, oscillator 10) characterized by a specific resonance frequency (see FIG. 1, resonance at 127 MHz for example), a number of the multiple different frequency components (see FIG. 1, f1-f5) being equal to the number of the transmitter elements in the array (see FIG. 1, 12 A-E = f1-5, equal to the number of transmit units); see col. 2, line 60 to col. 3, line 46.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "an oscillating element characterized by a specific resonance frequency" as taught by Kestler in the system of Hiramatsu, so that it would provide ultrasound apparatus that does not negatively impact the magnetic imaging; see Kestler col. 1, line 30-35.

8. Claims 12, 13, 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu in view of Tse (US007239625B1).

Regarding Claims 12 and 55, Hiramatsu discloses wherein the frequency components generated by the transmitter elements (see FIG. 1, multiplexers generating frequencies data/components of 2 MHz to 6 MHz; see col. 5, line 20-65).

Hiramatsu does not explicitly disclose "spaced from each other by a predetermined value".

However, Tse teaches the frequency components generated by the transmitter elements are spaced from each other by a predetermined value (see FIG. 1, each frequency data/component is spaced 100KHz separation; see col. 4, line 53 to col. 5, line 6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "spaced from each other by a predetermined value" as taught by Tse in the system of Hiramatsu, so that it would provide sequential transmission and asynchronous reception of data packets, and it would reduce the system installation costs; see Tse col. 2, line 55-65; see col. 3, line 33-36.

Regarding Claims 13 and 56, Hiramatsu discloses wherein said frequency modulation is such that a presence in the multi-frequency acoustic signal of a specific one of frequency components of said predetermined sequence of frequencies (see FIG. 1, modulation of frequency is the multiplex/multi-frequency acoustic signal comprising specific predefined sequences of frequencies 2 MHz to 6 MHz; see col. 5, line 20-65).

Hiramatsu does not explicitly disclose "indicative of binary "1" and absence of a specific frequency component is indicative of binary "0".

However, Tse teaches wherein said frequency modulation is such that a presence in the multi-frequency signal of a specific one of frequency components of said predetermined sequence of frequencies is indicative of binary "1" and absence of a specific frequency component is indicative of binary "0" (see FIG. 1, frequency modulation of multiple frequencies in a band where the sequences of frequencies data is indicated by "1" modulation, and "0" modulation where there is no signal; see col. 4, line 53 to col. 5, line 6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "indicative of binary "1" and absence of a specific frequency component is indicative of binary "0" as taught by Tse in the system of Hiramatsu , so that it would provide sequential transmission and asynchronous reception of data packets, and it would reduce the system installation costs; see Tse col. 2, line 55-65; see col. 3, line 33-36.

9. Claims 44 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu in view of Moriya (US 20030046064).

Regarding claims 44 and 60, Hiramatsu discloses wherein the control unit is configured to apply an amplitude modulation to the frequency components (see col. 6, line 5-15; see col. 14, line 20-25; 49-60; CPU applying ASK modulation to the frequency data/components),

the demodulation of the received acoustic signal including an error correction (see col. 13, line 15-60; see col. 14, line 33-65; using parity bits (see FIG. 20) in the demodulated received signal for error correction),

Hiramatsu does not explicitly disclose "the error correction being based on one of the following: checking for the amplitudes order in the received acoustic signal".

However, Moriya teaches the error correction being based on one of the following: checking for the amplitudes order in the received acoustic signal (see FIG. 2-3, error correction is performed based on determining/checking the amplitudes sequence/order in the received signal; see paragraphs 8-12, 82-85, 182, 197, 199).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "checking for the amplitudes order in the received acoustic

signal" as taught by Moriya in the system of Hiramatsu, so that it would provide coding and decoding methods which prevent a bit erasure during transmission; see Moriya paragraphs 16-18.

10. Claims 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu in view of Sanderford Jr (US 5,311,541).

Regarding Claim 49, Hiramatsu discloses receiving an external multi-frequency acoustic signal to the first communication system (see FIG. 1, 22, receiving a multiplex/multi-frequency signal at detector 24 to the audio source user/system; see col. 1, line 32-40; see FIG. 17; see col. 4, line 26 to col. 5, line 11; see col. 14, line 50 to col. 15, line 55); and

processing the received acoustic signal in accordance with data indicative of a predetermined sequence of frequencies (see FIG. 1, processing digital voice data to transform/translate into predefined sequence/number of frequencies (e.g. 2 MHz to 6 MHz); see col. 5, line 40-65) to thereby decode the data (see FIG. 1, to process receiver 23 to demodulate/decode the receive acoustic signal into an output voice data 1; see col. 4, line 30-65; see col. 6, line 15-25; see col. 14, line 25 to col. 15, line 65).

Hiramatsu does not explicitly disclose "encoded with certain data addressed".

However, Sanderford Jr teaches receiving an external acoustic signal encoded with certain data addressed to the first communication system (see FIG. 1a, transmitter 104 transmits message data signals encoded with a unique address to the receivers 105; see col. 5, line 46 to col. 6, line 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "encoded with certain data addressed" as taught by Sanderford Jr in the system of Hiramatsu, so that it would minimize the effects of data collision; see Sanderford Jr col. 1, line 56-65.

Regarding Claim 51, Hiramatsu discloses wherein the data is indicative of the network of the respective acoustic transducer arrangement (see FIG. 1, the acoustic signal data is addressed/targeted to respective acoustic arrangement/setup of receiving apparatus 2 in the receiving network; see FIG. 17; see col. 4, line 26 to col. 5, line 11; see col. 14, line 50 to col. 15, line 55).

Hiramatsu does not explicitly disclose "network addressed".

However, Sanderford Jr teaches wherein the data is indicative of the network addressed of the respective acoustic arrangement (see FIG. 1a, transmitter 104 transmits message data signals encoded with a unique address to the receivers 105; see col. 5, line 46 to col. 6, line 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "network addressed" as taught by Sanderford Jr in the system of Hiramatsu, so that it would minimize the effects of data collision; see Sanderford Jr col. 1, line 56-65.

Allowable Subject Matter

11. **Claims 7, 8, and 53** are objected to as set forth above in paragraph 1 and as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN N. MOORE whose telephone number is (571)272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ian N. Moore
Primary Examiner
Art Unit 2416

/Ian N. Moore/
Primary Examiner, Art Unit 2416